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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,801	06/27/2003	Kouji Tsujita	P68946US0	5888

7590 07/28/2005
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EXAMINER

CHEN, TIANJIE

ART UNIT PAPER NUMBER

2652

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,801

Applicant(s)

TSUJITA ET AL.

Examiner

Tianjie Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) 3-5 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 2 and 6 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Final Rejection

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al (JP 2-046442) in view of Nakayama et al (US 5,338,646).

Claim 1, Yoshida et al shows an optical disk in Fig. 1 including: a first substrate (upper layer 11) having a recording layer (upper layer 12) thereon, information to be recorded on the recording layer being reproducible with irradiation of a laser beam (24 in Fig. 2); a reflective layer (lower layer 13) formed on the recording layer; a second transparent substrate (lower layer 11), the laser beam being incident to the second substrate in reproduction (Fig. 2).

Yashida et al does not show that a bonding layer provided between the first and the second substrates, the substrates being bonded to each other by the bonding layer via the reflective layer, the bonding layer being made of ultraviolet-hardened resin, and at least one type of photochromic dye, the photochromic dye being stable against the laser beam.

However, Nakayama et al shows an optical disk, wherein layer 17 is a bonding (adhesive) layer (Column 6, line 20) made of ultraviolet-hardened resin (Column 6, line 20), and at least one type of photochromic dye (stilbene direvative; column 6, lines

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24-25), the photochromic dye being stable against the laser beam since it is cured as a recording layer (Column 6, line 63-65).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to replace the two layers 12 in Yashida et al's device with Nakayama et al's material. The rationale is as follows: Yashida et al shows a photochromic material, but does not show the detail of making the material. Nakayama et al shows that the photochromic materials for photochromic layer and composition ratio (Column 6, lines 23-46) of the materials. Nakayama et al further shows that his photochromic material also can be used as a binder to append layers together (Column 6, lines 53-65). One of ordinary skill in the art would have been motivated to do the replacement thus being able to make the photochromic material and use it as a both binder and recording layer. In thus constructed device, a bonding layer (lower layer 12) provided between the first and the second substrates 11 and 11, the substrates 11 and 11 being bonded to each other by the bonding layer (lower layer 12) via the reflective layer (lower layer 13), the bonding layer being made of ultraviolet-hardened resin, and at least one type of photochromic dye, the photochromic dye being stable against the laser beam.

Claim 6, Nakayama et al shows that the photochromic dye is colored when exposed to light of a first specific wavelength whereas becomes colorless when exposed to light of a second specific wavelength at which the color is absorbed (Column 6, lines 47-52).

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2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al in view of Nakayama et al as applied to claim 1 above, and further in view of Kabayashi (JP 10-143924).

Claim 2, in above constructed device, the substrates being bonded to each other so that the reflective layers face each other at surfaces thereof opposite to other surfaces thereof formed on the recording layers and a second recording layer (lower layer 12) provided on the second substrate; but does not specify a semi-transparent reflective layer.

Kobayashi further shows a semi-transparent reflective layer 103 ([0029]) formed on another recording layer provided on the second transparent substrate 101, the substrates being bonded to each other so that the reflective layers face each other at surfaces thereof opposite to other surfaces thereof formed on the recording layers.

It would have been obvious at the time the invention set the second reflective layer as a semi-transparent reflective layer as taught by Kabayashi since it is common practice in making an optical disc having two recording layers to making the second reflective layer semi-transparent thus being able to read the information stored in first recording layer.

Response to Arguments

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


TIANJIE CHEN
PRIMARY EXAMINER